

CLAIMS

1. A mobile communications terminal for use in a cellular communications system, comprising

5 an electronic circuit (200) for receiving a wire-less
communications signal carrying signal channels having
processing means for extracting the signal channels,
characterized in that

10 the electronic circuit (200) is adapted to classify a type of interference, affecting the communications quality, by evaluating signals selected in the electronic circuit that are selected as signals having information for classifying a type of interference in one of at least two predetermined classes of interference.

15 2. A mobile communications terminal according to claim 1,
characterized in that a first class of interference
includes inter-cell interference and that a second class
of interference includes intra-cell interference.

3. A mobile communications terminal according to any one
20 of claims 1 and 2, characterized in that the mobile
communications terminal comprises first means (204) with
selected signals for adaptively regulating the amplitude
of signals processed by the electronic circuit.

4. A mobile communications terminal according to claim 3,
25 characterized in that the first means (204) includes
Automatic Gain Control means.

5. A mobile communications terminal according to any one of claims 3 and 4, characterized in that the first means includes means (210) with selected signals for

communicating commands of controlling transmitted power with a base station capable of communicating with a multitude of mobile communications terminals.

6. A mobile communications terminal according to any one
5 of claims 1 through 5, characterized in that the mobile
communications terminal comprises second means with
selected signals for monitoring the communications
quality (210).

7. A mobile communications terminal according to claim 6,
10 characterized in that the second means includes means
(210) for monitoring the signal strength of the received
signal.

8. A mobile communications terminal according to any one
15 of claims 6 and 7, characterized in that the second means
includes means (210;603) for monitoring the signal-to-
interference ratio, SIR, of the received signal.

9. A mobile communications terminal according to any one
20 of claims 1 through 8, characterized in that the mobile
communications terminal comprises means (210;604) for
processing the communication signal in a first of at
least two ways; the first way being selected from the at
least two ways in dependence of a classified type of
interference.

10. A mobile communications terminal according to any one
25 of claims 1 through 9, characterized in that the mobile
communications terminal comprises filter means (604) for
processing the communication signal by means of a set of
filter coefficients (α) selected in dependence of a
classified type of interference.

30 11. A mobile communications terminal according to claim
10, characterized in that the filter means is a low-pass

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filter (604); wherein the filter has a relatively high band-width when interference is classified to be intra-cell interference and has a relatively low band-width when interference is classified to be inter-cell
5 interference.

12. In a mobile communications terminal adapted for use in a cellular communications system a method comprising the steps of:

10 receiving a wire-less communications signal carrying signal channels and extracting the signal channels by means of an electronic circuit;

characterized in further comprising the step of:

15 classifying a type of interference, affecting the communications quality, by evaluating signals selected in the electronic circuit as signals having information for classifying a type of interference in one of at least two predetermined classes of interference.

20 13. A method according to claim 12 characterized in that the a first class includes intercell interference and that a second class includes intracell interference.

25 14. A method according to any one of claims 12 and 13 characterized in that the method further comprises the step of processing the communication signal in a first of at least two ways (A1;A2); the first way being selected from the at least two ways in dependence of a classified type of interference.

30 15. A method according to any one of claims 12 through 14 characterized in that the method further comprises the step of filtering the communication signal with a low-pass filter; wherein the filter has a relatively high

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band-width when interference is classified to be intra-cell interference and has a relatively low band-width when interference is classified to be inter-cell interference.